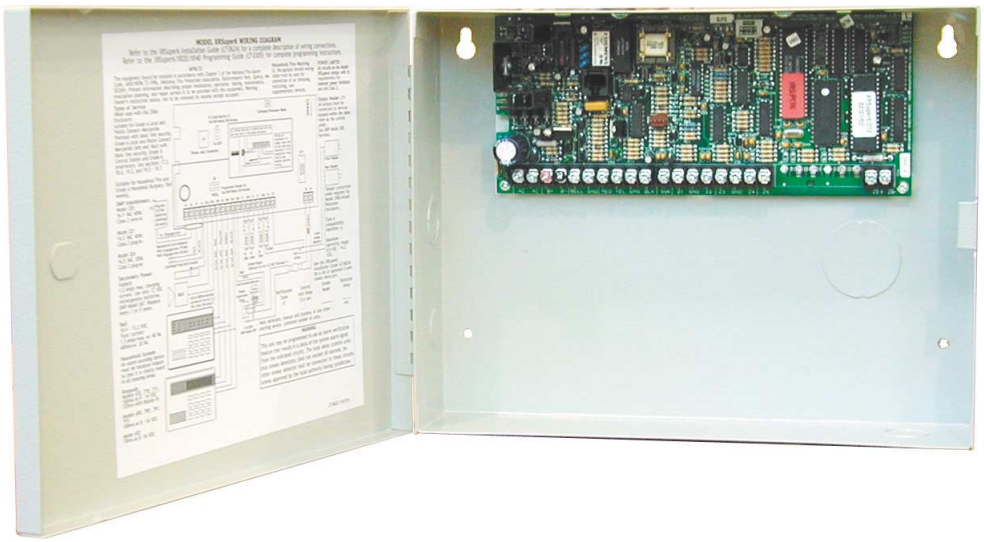
INSTALLATION GUIDE



XRSUPER6 / XR20 / XR40
COMMAND PROCESSOR™ PANELS

Digital Monitoring Products

MODEL XRSuper6/XR20/XR40
COMMAND PROCESSOR
INSTALLATION GUIDE

FCC NOTICE

This equipment generates and uses radio frequency energy and, if not installed and used properly in strict accordance with the manufacturer's instructions, may cause interference with radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specification in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the installer is encouraged to try to correct the interference by one or more of the following measures:

Reorient the receiving antenna

Relocate the computer with respect to the receiver

Move the computer away from the receiver

Plug the compute into a different outlet so that computer and receiver are on different branch circuits

If necessary, the installer should consult the dealer or an experienced radio/television technician for additional suggestions. The installer may find the following booklet, prepared by the Federal Communications Commission, helpful:

"How to identify and Resolve Radio-TV Interference Problems."

This booklet is available from the U.S. Government Printing Office, Washington D.C. 20402

Stock No. 004-000-00345-4

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Information furnished by DMP is believed to be accurate and reliable.

This information is subject to change without notice.

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Revisions to This Document

This section explains the changes that were made to this document during this revision. This section lists the date the change was made, the section number and section heading, and a quick summary of the change.

Date	Section Number and Heading	Quick Explanation of Changes
2/04	1.6 Enclosure Specifications	Added 350 Enclosure information
	3.5 Wiring Diagram	Added resistor part numbers and updated power supervision relay information.
	Sections 3.4 and 6.7	Added keypad models 690F, 790F, and 693. Added/revised current draw information.
	4.1 Mounting the Enclosure	Added 350 Enclosure as an option.
	24.2 Installation for Derived Chanel Burglary	Revised drawing and added STU connection text.
5/03	6.5 Battery Supervision	Information added clarifying the battery test.
	6.7 Standby Battery Calculations	Current draw of some products adjusted.
	8.7 Keypad Addressing	Section added with table explaining keypad addressing.
1/03	1.4 Keypads	Added eight and 16-zone expansion modules.
	1.6 Enclosure Specifications	Updated enclosure specifications.
	3.4 Command Processor Accessories	Added 690 keypad.
	3.5 XRSuper6/XR20/XR40 Wiring	Updated current draw ratings.
	4.1 Mounting the Enclosure	Updated enclosure illustrations.
	4.3 Installation Specifications	Updated wording for bus circuit distances.
	11.1 Terminals 25 and 26	Added note about sensor reset on zone 10. Smoke Detector Chart updated.
	11.2 Zone 9 Wiring on XR20/XR40	Section added about proper EOL wiring on zone 9.
	12.3 Model 860 Relay Module	Updated relay contact rating to one Amp.
	15.8 UL Listed Receivers	Added MLR2-E Receiver.
	20.8 UL Listed Receivers	Added MLR2-E Receiver.
	24.2 Installation for Derived Channel	Updated PCB illustration and added note about zone type.
	Back Cover	Added Operating Instructions

Panel Specifications

1.1 Power Supply

Transformer Input:	16.5 VAC 40 VA (Models 320 Wire-in or 321 Plug-in)
Standby Battery:	12 VDC 7.0 Ah (40 VA transformer charges up to 2 batteries)
Auxiliary Output:	12 VDC at 500mA
Bell Output:	12 VDC at 1.5 Amps
Smoke Detector Output:	12 VDC at 100mA

All circuits inherent power limited

1.2 Communication

Built-in SDLC Digital Dialer communication to DMP Model SCS-1 and SCS-1R Receivers

Built-in 4-2 communication to non-DMP receivers

Built-in M2E (Radionics Modem IIe) communication to non-DMP receivers

Built-in CID (Contact ID) communication to non-DMP receivers

Any panel can operate as a local system.

1.3 Panel Zones

Nine 1k Ohm EOL burglary zones: zones 1 to 9 on XR20 and XR40 panels, and zones 1 to 5 on the XRSuper6.

One 3.3k Ohm EOL Class B powered fire zone with reset capability: zone 6 on the XRSuper6, and zone 10 on XR20 and XR40 panels.

1.4 Keypads

You can connect up to four supervised keypads to the XRSuper6/XR20 panels and eight supervised keypads on the XR40.

- 16 or 32-character alphanumeric keypads
- 10-zone LED keypads

In addition, the following zone expanders can be added to the XRSuper6/XR20/XR40 panels:

- One, four, eight and 16-zone expansion modules
- Single-zone PIR and glassbreak detectors
- One 738A Ademco Wireless interface for up to 32 points of zone expansion
- One FA426 Wireless receiver for up to 16 points of zone expansion (Two FA426 on the XR40)

When using the FA426 Wireless Receiver, you can add unsupervised devices to address five of the XRSuper6 and XR20.

1.5 Outputs

The XRSuper6/XR20/XR40 panels provide four open collector outputs rated for 50mA each. A Model 300 Output Harness is required. The open collector outputs provide the ground connection for a positive voltage source.

1.6 Enclosure Specifications

The XRSuper6/XR20/XR40 panel ships in an enclosure with EOL resistors, battery leads, user's guide, and programming sheet.

XRSuper6, XR20, XR40 in Model 340 Enclosure

Enclosure size:	12.5" W x 9.5" H x 2.75" D
Color:	Gray (G)
Construction:	20-gauge, cold-rolled steel

XRSuper6M, XR20M, XR40M in Model 350 Enclosure

Enclosure size:	17.5" W x 13.5" H x 3.5" D
Color:	Gray (G) or Red (R)
Construction:	18-gauge, cold-rolled steel

XRSuper6M, XR20M, XR40M in Model 349 Enclosure

Enclosure size:	12.5" W x 11.25" H x 3.5" D
Color:	Gray (G) or Red (R)
Construction:	20-gauge, cold-rolled steel

XR40A in Grade A Model 350A Enclosure

Enclosure size:	17.1" W x 13.2" H x 3.7" D
Color:	Gray (G)
Construction:	18-gauge with 16-gauge door

Introduction

2.1 Description

The DMP XRSuper6/XR20/XR40 Command Processor™ panels are powerful 12 VDC burglary and fire communicator panels with battery backup. The XR20 and XR40 panels provide nine on-board burglary zones and one on-board 12 VDC Class B powered fire zone. The XRSuper6 provides five burglary zones and one fire zone. The fire zone has a reset capability to provide for 2-wire smoke detectors, relays, or other latching devices. The panels can communicate to one or two DMP SCS-1/SCS-1R Receivers using SDLC digital dialer, 4-2, or Contact ID (CID) reporting formats. In addition, the XRSuper6/XR20/XR40 can communicate using the Radionics Modem IIe format.

2.2 System Configurations

The panels can be programmed to operate as either an All/Perimeter system that provides one Perimeter area and one Interior area, or as a Home/Sleep/Away system that provides one Perimeter, one Interior, and one Bedroom area. The Bedroom area can include any protection devices the user wants disarmed during their sleeping hours and armed in the Away mode. In addition, the XR20/XR40 can operate as a four area system.

2.3 Before You Begin

Before installing the panel, we recommend you read through the entire contents of this guide. Familiarize yourself with the features of the panel and the key points to remember during the installation. Be sure to read and understand all of the caution statements printed in bold italics. In addition to this installation guide, you should also read through and familiarize yourself with these other product documents:

- XRSuper6/XR20/XR40 Programming Guide (LT-0305)
- XRSuper6 Programming Sheet (LT-0621)
- XRSuper6 Security Command User's Guide (LT-0622)
- XR20 Program Information Sheet (LT-0302)
- XR20 Security Command User's Guide (LT-0303)
- XR40 Programming Sheet (LT-0493)
- XR40 Security Command User's Guide (LT-0494)

2.4 About this Guide

The information contained in this guide is organized into five sections:

- The **Table of Contents** at the front of this guide lists all of the headings and the page number where the information can be found.
- The **Introduction** section gives you an overview of the various components that go into a panel system and diagrams some typical system configurations.
- The **Installation** section begins with mounting instructions for the enclosure and takes you through the proper way to power up the panel prior to programming.
- The **Compliance** section lists various standards to which the panels comply.
- The **Wiring Diagram** section provides common system drawings for the panels.

Caution notes

Throughout this guide you will see caution notes containing information you need to know when installing the panel. These cautions are indicated with a yield sign. Whenever you see a caution note, make sure you completely read and understand its information. Failing to follow the caution note can cause damage to the equipment or improper operation of one or more components in the system. See the example shown below.

Always ground the panel before applying power to any devices: The panel must be properly grounded before connecting any devices or applying power to the panel. Proper grounding protects against Electrostatic Discharge (ESD) that can damage system components.

2.5 How to Use this Guide

To locate information about the installation of the panel, first go to the Table of Contents at the front of this guide. Find the subject heading that closely describes the information you need and turn to the section number shown to the right of the heading.

The text that follows the heading has been written to provide as much information about the subject as possible. If you cannot find the information you need under that heading, try scanning through a few of the headings before and after and reading the text under those that sound similar.

System Components

3.1 Description

The DMP system is made up of an alarm panel with built in communicator, an enclosure, a 16.5 VAC transformer, and a 12 VDC 7.0 Ah battery. You can add Security Command keypads to the system and can also connect auxiliary devices to the panel's open collector outputs to expand the basic system. Combined current requirements of additional modules may require an auxiliary power supply. Refer to the Standby Battery Power Calculation section in this guide when calculating power requirements. In addition, up to 32 points of zone expansion can be added to the XR40, and 16 points to the XR20 and XRSuper6.

3.2 Wiring Diagram

The system wiring diagram in Figure 1, on the following page, shows some of the accessory devices you can connect for use in various applications. A complete description of each module follows.

3.3 Lightning Protection

Metal Oxide Varistors and Transient Voltage Suppressors help protect against voltage surges on input and output circuits. A transorb is provided for the Smoke Detector Output Circuit (Terminal 11). This transient protection provides additional resistance to electrical surges such as lighting. Additional surge protection is available by installing the DMP 370 or 370RJ Lightning Suppressors.

3.4 Command Processor Accessories

You can connect any combination (up to four on XRSuper6 and XR20, and up to eight on XR40) of Model 770, and 771 vacuum fluorescent, 690/690F, 790/790F, 791, and 693/793 LCD, or 692 LED Security Command Keypads to the 4-wire keypad data bus provided by the panel on terminals 7, 8, 9, and 10. Also, you can connect Model 712-8 714, 715, 714-8, 714-16, 715-8, 715-16 Zone Expansion Modules to the keypad bus. Additionally, you can connect one Model 738A Ademco Interface Module or one Model FA426 Wireless Receiver to the keypad bus. You can connect one additional Model FA426 Wireless Receiver to the XR40 keypad bus.

3.5 XRSuper6/XR20/XR40 Wiring Diagram

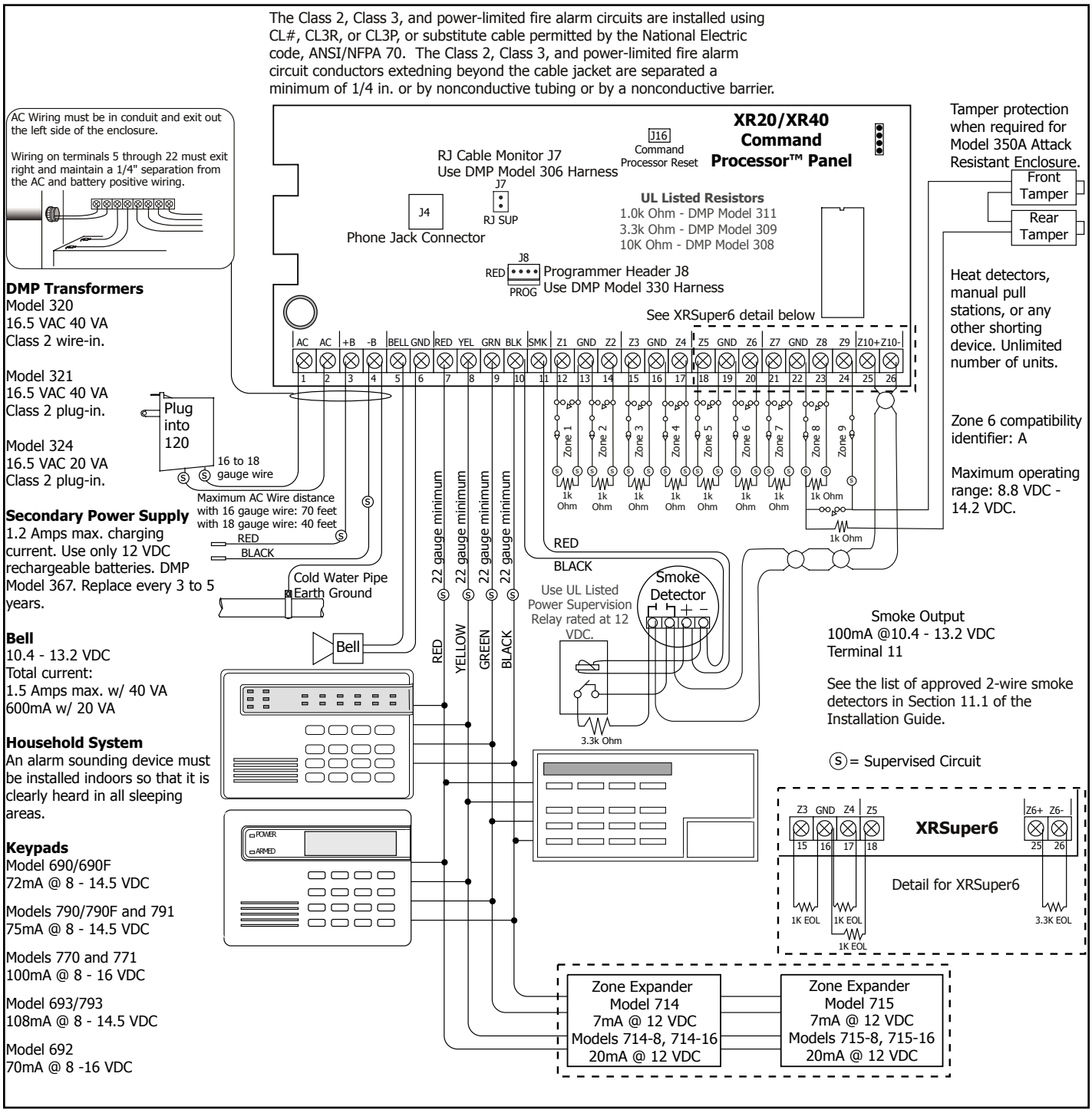

The Class 2, Class 3, and power-limited fire alarm circuits are installed using CL#, CL3R, or CL3P, or substitute cable permitted by the National Electric code, ANSI/NFPA 70. The Class 2, Class 3, and power-limited fire alarm circuit conductors extedning beyond the cable jacket are separated a minimum of 1/4 in. or by nonconductive tubing or by a nonconductive barrier.
AC Wiring must be in conduit and exit out the left side of the enclosure.
Wiring on terminals 5 through 22 must exit right and maintain a 1/4" separation from the AC and battery positive wiring.
XR20/XR40 Command Processor™ Panel
J16 Command Processor Reset
RJ Cable Monitor J7
Use DMP Model 306 Harness
J7
RJ SUP
J4
Phone Jack Connector
UL Listed Resistors
1.0k Ohm - DMP Model 311
3.3k Ohm - DMP Model 309
10K Ohm - DMP Model 308
J8
RED
PROG
Programmer Header J8
Use DMP Model 330 Harness
See XRSuper6 detail below
AC AC +B -B BELL GND RED YEL GRN BLK SMK Z1 GND Z2 Z3 GND Z4 Z5 GND Z6 Z7 GND Z8 Z9 Z10+ Z10-
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26
Zone 1
Zone 2
Zone 3
Zone 4
Zone 5
Zone 6
Zone 7
Zone 8
Zone 9
1k Ohm
Tamper protection when required for Model 350A Attack Resistant Enclosure.
Front Tamper
Rear Tamper
Heat detectors, manual pull stations, or any other shorting device. Unlimited number of units.
Zone 6 compatibility identifier: A
Maximum operating range: 8.8 VDC - 14.2 VDC.
DMP Transformers
Model 320
16.5 VAC 40 VA
Class 2 wire-in.
Model 321
16.5 VAC 40 VA
Class 2 plug-in.
Model 324
16.5 VAC 20 VA
Class 2 plug-in.
Plug into 120
16 to 18 gauge wire
Maximum AC Wire distance with 16 gauge wire: 70 feet with 18 gauge wire: 40 feet
Secondary Power Supply
1.2 Amps max. charging current. Use only 12 VDC rechargeable batteries. DMP Model 367. Replace every 3 to 5 years.
RED
BLACK
Cold Water Pipe Earth Ground
22 gauge minimum
RED
YELLOW
GREEN
BLACK
Use UL Listed Power Supervision Relay rated at 12 VDC.
Smoke Detector
Smoke Output
100mA @10.4 - 13.2 VDC
Terminal 11
See the list of approved 2-wire smoke detectors in Section 11.1 of the Installation Guide.
S = Supervised Circuit
Bell
Bell
10.4 - 13.2 VDC
Total current:
1.5 Amps max. w/ 40 VA
600mA w/ 20 VA
Household System
An alarm sounding device must be installed indoors so that it is clearly heard in all sleeping areas.
Keypads
Model 690/690F
72mA @ 8 - 14.5 VDC
Models 790/790F and 791
75mA @ 8 - 14.5 VDC
Models 770 and 771
100mA @ 8 - 16 VDC
Model 693/793
108mA @ 8 - 14.5 VDC
Model 692
70mA @ 8 -16 VDC
POWER
ARMED
3.3k Ohm
XRSuper6
Z3 GND Z4 Z5 Z6+ Z6-
15 16 17 18 25 26
Detail for XRSuper6
1K EOL
1K EOL
1K EOL
3.3K EOL
Zone Expander Model 714
7mA @ 12 VDC
Models 714-8, 714-16
20mA @ 12 VDC
Zone Expander Model 715
7mA @ 12 VDC
Models 715-8, 715-16
20mA @ 12 VDC

Figure 1: System Wiring Diagram

Installation

4.1 Mounting the Enclosure

The metal enclosure must be mounted in a secure, dry place to protect the panel from damage due to tampering or the elements. It is not necessary to remove the PCB when installing the enclosure. The PCB may be installed in the standard 340 enclosure, the optional 349 enclosure, the optional 350 enclosure, or the optional 350A Grade A enclosure.

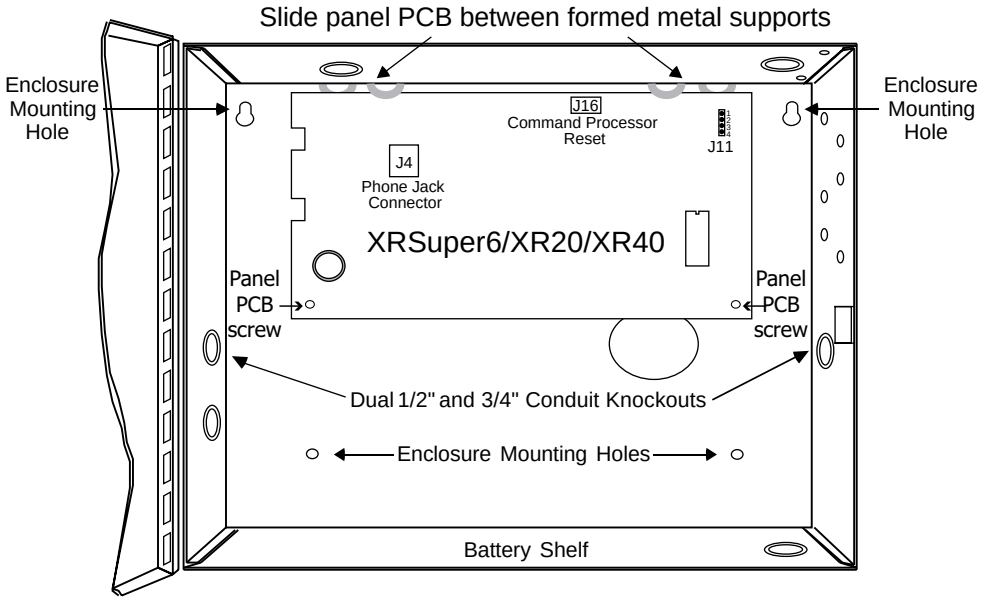


Figure 2: XRSuper6/XR20/XR40 panel in Standard 340 Enclosure

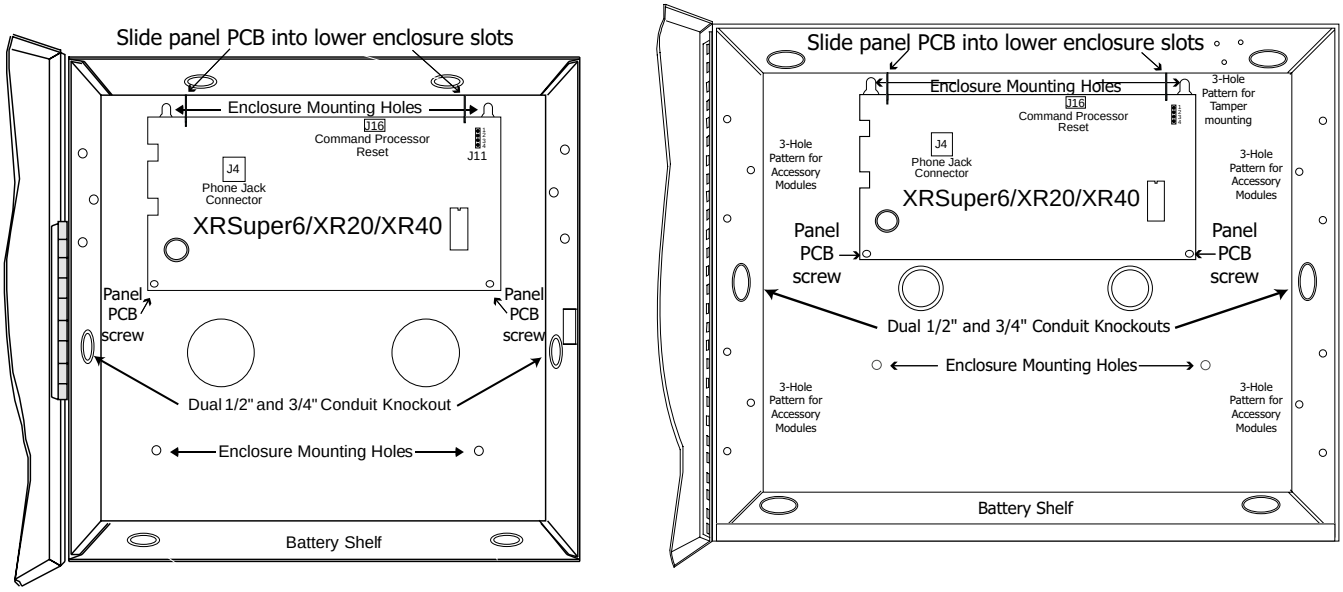


Figure 3: XRSuper6/XR20/XR40 panel in Optional 349 or 350 Enclosure

4.2 Mounting Keypads

Security Command keypads have removable covers that allow you to easily mount the base to a wall or other flat surface using the screw holes provided on each corner.

For mounting keypads on solid walls, or for applications where conduit is required, use a DMP 695, 696, 775, or 776 keypad conduit backbox.

4.3 Installation Specifications

Several factors determine the performance characteristics of the keypad bus: the length of wire used, the number of devices connected, and the voltage at each device. When planning an LX-Bus™ and keypad bus installation, keep in mind the following four specifications:

1. You can install individual keypads on wire runs of up to 500 feet using 22 gauge wire or up to 1,000 feet using 18 gauge wire. To increase the wire length or add additional devices, a power supply is required.
2. Maximum distance for any one keypad bus circuit (length of wire) is 2,500 feet regardless of the gauge of wire. This distance can be in the form of one long wire run or multiple branches with all wiring totaling no more than 2,500 feet.
3. Maximum number of devices per 2,500 feet circuit is 40. (Note: Each panel allows a specific number of supervised keypads. Additional keypads can be added in the unsupervised mode. Refer to the panel's installation guide for the specific number of supervised keypads that are allowed.)
4. Maximum voltage drop between the panel (or auxiliary power supply) and any device is 2.0 VDC. If the voltage at any device is less than the required level, an auxiliary power supply should be added at the end of the circuit. The 2.0 VDC rule has not been tested by UL.

Refer to the 710 Bus Splitter/Repeater Module Installation Sheet (LT-0310) and the Trouble-free LX-Bus and Keypad Bus Wiring Application Note (LT-2031) for additional information.

Primary Power Supply

5.1 AC terminals 1 and 2

Connect the transformer wires to terminals 1 and 2 on the panel. Use no more than 70 ft. of 16 gauge, or 40 ft. of 18 gauge, wire between the transformer and the panel.

Always ground the panel before applying power to any devices: The panel must be properly grounded before connecting any devices or applying power to the panel. Proper grounding protects against Electrostatic Discharge (ESD) that can damage system components. See Earth ground, in the Secondary Power Supply section.

5.2 Transformer Types

The transformer for the panel is 16.5 VAC 40 VA, which provides up to 1.5 Amps of bell output current, 500mA of auxiliary current, and 100mA of smoke detector output. You can use either the Model 320 wire-in or 321 plug-in transformer with the panel. The total current available is limited by the total battery standby requirements of the installation.

The transformer must be connected to a 120 VAC 60 Hz commercial power outlet that is not controlled by a wall switch. ***Never share the transformer output with any other equipment.***

Secondary Power Supply

6.1 Battery Terminals 3 and 4

Connect the black battery lead to terminal 4 on the panel and to the negative terminal of the battery. The negative terminal connects to the enclosure ground internally through the panel circuit board. Connect the red battery lead to terminal 3 on the panel and to the positive terminal of the battery. Observe polarity when connecting the battery. The panel can charge up to two batteries.

Use sealed lead-acid batteries only: Use the DMP Model 367, 12 VDC 7.0 Ah sealed lead-acid rechargeable battery. Batteries supplied by DMP or manufactured by Eagle Picher or Yuasa have been tested to ensure proper charging with DMP products.

GEL CELL BATTERIES CANNOT BE USED WITH THE XRSuper6/XR20/XR40 PANEL.

6.2 Earth Ground

Terminal 4 of the panel must be connected to earth ground using 14 gauge or larger wire to provide proper transient suppression. DMP recommends connecting to a metal cold water pipe or ground rod only. Do not connect to electrical conduit or a telephone company ground.

6.3 Replacement Period

DMP recommends replacing the battery every 3 to 5 years under normal use.

6.4 Discharge/Recharge

The panel battery charging circuit float charges at 13.9 VDC at a maximum current of 1.2 Amps using a 40 VA transformer. The total current available is reduced by the combined auxiliary current draw from terminals 7, 11, and 25. The various battery voltage levels are listed below:

Battery Trouble:	Below	11.9 VDC
Battery Restored:	Above	12.6 VDC

6.5 Battery Supervision

The panel tests the battery once every hour when AC power is present. This test occurs 15 minutes past each hour and lasts for five seconds. A load is placed on the battery and if its voltage falls below 11.9 VDC a low battery is detected. If AC power has failed, a low battery is detected any time the battery voltage falls below 11.9 VDC.

If a low battery is detected with AC power present, the test is repeated every two minutes until the battery charges above 12.6 VDC; the battery restored voltage. If a faulty battery is replaced with a fully charged battery, the restored battery will not be detected until the next two-minute test is done.

6.6 XRSuper6/XR20/XR40 Power Requirements

During AC power failure, the panel and all auxiliary devices connected draw their power from the battery. All devices must be taken into consideration when calculating the battery standby capacity. On the following page is a list of the power requirements of the panel. Add the additional current draw of Security Command keypads, smoke detector output, and any other auxiliary devices used in the system for the total current required. The total is then multiplied by the total number of standby hours required to arrive at the total Ampere-hours required.

6.7 XRSuper6/XR20/XR40 Standby Battery Calculations

Standby Battery Power Calculations	Standby Current	Alarm Current
Command Processor Panel	Qty _____x 50mA _____mA	50mA _____mA
Active Zones 1-9 (1-5 on XRSuper6)	Qty _____x 1.6mA _____	Qty _____x *2mA _____
Active Zone 10 (Zone 6 on XRSuper6)	Qty _____x 4mA _____	Qty _____x 30mA _____
2-Wire Smoke Detectors	0.1mA _____	Qty _____x 0.1mA _____
Panel Bell Output		1500mA Max. _____
690/690F Security Command Keypad	Qty _____x 77mA _____	Qty _____x 84mA _____
Annunciator (ON)		20mA _____
692 Keypad	Qty _____x 30mA _____	Qty _____x 70mA _____
790/790F Security Command Keypad	Qty _____x 77mA _____	Qty _____x 84mA _____
Active Zones (EOL Installed)	1.6mA _____	Qty _____x *2mA _____
Annunciator (ON)		20mA _____
791 Easy Entry Keypad	Qty _____x 100mA _____	Qty _____x 100mA _____
Active Zones (EOL Installed)	1.6mA _____	Qty _____x *2mA _____
Annunciator (ON)		20mA _____
693/793 Easy Entry Keypad	Qty _____x 92mA _____	Qty _____x 120mA _____
Active Zones (EOL Installed)	1.6mA _____	Qty _____x *2mA _____
Annunciator (ON)		20mA _____
770, 771 Security Command Keypads	Qty _____x 100mA _____	Qty _____x 100mA _____
Active Zones (EOL Installed)	1.6mA _____	Qty _____x *2mA _____
Annunciator (ON)		20mA _____
733 Wiegand Interface Module	Qty _____x 30mA _____	Qty _____x 30mA _____
Active Zones (EOL Installed)	1.6mA _____	Qty _____x *2mA _____
Annunciator (ON)		20mA _____
736P POPIT Interface Module	Qty _____x 25mA _____	Qty _____x 25mA _____
Radionics Popex, POPITs, OctoPOPITs	Qty _____x ___mA _____	Qty _____x ___mA _____
738A Ademco Wireless Interface Module	Qty _____x 75mA _____	Qty _____x 75mA _____
710 Bus Splitter/Repeater Module	Qty _____x 30mA _____	Qty _____x 30mA _____
711, 771E, 714 Zone Expansion Modules	Qty _____x 7mA _____	Qty _____x 7mA _____
Active Zones (EOL Installed)	Qty _____x 1.6mA _____	Qty _____x *2mA _____
712-8 Zone Expansion Module	Qty _____x 17mA _____	Qty _____x 17mA _____
Active Zones (EOL Installed)	Qty _____x 1.6mA _____	Qty _____x *2mA _____
714-8, 714-16 Zone Expansion Module	Qty _____x 20mA _____	Qty _____x 20mA _____
Active Zones (EOL Installed)	Qty _____x 1.6mA _____	Qty _____x *2mA _____
715 Zone Expansion Module	Qty _____x 7mA _____	Qty _____x 7mA _____
Active Zones (EOL Installed)	Qty _____x 4mA _____	Qty _____x *30mA _____
2-Wire Smokes	Qty _____x .1mA _____	Qty _____x .1mA _____
715-8, 715-16 Zone Expansion Modules	Qty _____x 20mA _____	Qty _____x 20mA _____
Active Zones (EOL Installed)	4mA _____	*30mA _____
2-Wire Smokes	.1mA _____	.1mA _____
iCOM*SL* Internet Alarm Communicator	80mA _____	80mA _____
FA426 16-Point Receiver	47mA _____	47mA _____
Aux. Powered Devices on Terminals 7 and 11	_____mA	_____mA
Other than Keypads and Modules		

Total Standby _____mA Total Alarm _____mA

Total Standby_____mA x number of Standby Hours needed _____ = _____mA-hours

Total Alarm _____mA _____mA-hours

\+ _____mA-hours

* Based on 10% of active zones in alarm condition.

Total X .0001

= _____Amp-hrs Required

Bell Output

7.1 Terminals 5 and 6

Nominal 12 VDC is supplied by terminal 5 on the panel to power alarm bells or horns. The output is rated for a maximum of 1.5 Amps with a 40 VA transformer. This output can be steady, pulsed, or Temporal Code 3 depending upon the Bell Action specified in Output Options programming. Terminal 6 is the ground reference for the bell circuit.

Keypad Data Bus

8.1 Description

Terminals 7, 8, 9, and 10 of the panel are designated as the keypad data bus. In addition to keypads, the XRSuper6/XR20/XR40 allows the connection of any combination of zone expansion modules, 5845LX Glassbreak Detectors, and 6155LX PIRs, to the keypad bus up to the maximum of four devices. The XRSuper6 allows the connection of four zones on address one.

8.2 Terminal 7 - RED

Nominal 12 VDC is supplied at terminal 7 to power Security Command keypads and zone expanders. This is also where power for any auxiliary device is supplied. The ground reference for terminal 7 is terminal 10. The maximum output is rated at 500mA. All auxiliary devices totaled together must not exceed the panel's maximum current rating of 500mA.

8.3 Terminal 8 - YELLOW

Data receive from keypads and zone expanders.

8.4 Terminal 9 - GREEN

Data transmit to keypads and zone expanders.

8.5 Terminal 10 - BLACK

Terminal 10 is the ground reference for Security Command keypads, zone expanders, and any auxiliary devices being powered by terminals 7 and 11.

8.6 Programming Connection

A locking 4-pin header (J8) is provided to connect a keypad when using a DMP Model 330 Programming Cable. This provides a quick and easy connection for programming the panel.

8.7 Keypad Addressing

Address	XRSuper6 Zone #	XR20 Zone #	XR40 Zone #
Panel Zones	1-6	1-10	1-10
1	7-10	11-14	11-14
2	21-24	21-24	21-24
3	31-34	31-34	31-34
4	41-44	41-44	41-44
5	*	*	51-54
6	N/A	N/A	61-64
7	N/A	N/A	71-74
8	N/A	N/A	81-84

*** Note:** Address 5 can be used with unsupervised keypads. This allows all 16 zones to be used by Zone Expansion Modules, such as a 714-16.

Smoke and Glassbreak Detector Output

9.1 Terminal 11

Nominal 12 VDC at 100mA maximum (shared by terminal 25) is supplied at terminal 11 to power 4-wire smoke detectors or other auxiliary powered devices. This output can be turned off by the user for 5 seconds using the Sensor Reset option in the User Menu. Terminal 10 is the ground reference for terminal 11.

Burglary Zones

10.1 Description

On XR20/XR40 panels, terminals 12 to 24 are the nine burglary zones. For programming purposes, the zone numbers are 1 to 9. The zone configurations on terminals 12 to 24 are described below. The XRSuper6 terminals 12 to 18 are the five burglary zones with terminal 16 providing the ground for zone 5 (terminal 18).

Terminal	Function	Terminal	Function
12	Zone 1 voltage sensing	19	Ground for zones 5 & 6
13	Ground for zones 1 & 2	20	Zone 6 voltage sensing
14	Zone 2 voltage sensing	21	Zone 7 voltage sensing
15	Zone 3 voltage sensing	22	Ground for zones 7, 8, & 9
16	Ground for zones 3 & 4 (& 5 on XRSuper6)	23	Zone 8 voltage sensing
17	Zone 4 voltage sensing	24	Zone 9 voltage sensing
18	Zone 5 voltage sensing		

The voltage sensing terminal measures the voltage flowing through the 1k Ohm End-of-Line resistor to the zone's ground terminal. Dry contact sensing devices can be used in series (normally-closed) or in parallel (normally-open) with any of the burglary protection zones.

10.2 Operational Parameters

Each burglary protection zone detects three conditions: open, normal, and short.

The parameters for each are listed below:

Condition	Resistance on zone	Voltage on right terminal
Open	over 1300 ohms	over 2.0 VDC
Normal	600 to 1300 ohms	1.2 to 2.0 VDC
Short	under 600 ohms	under 1.2 VDC

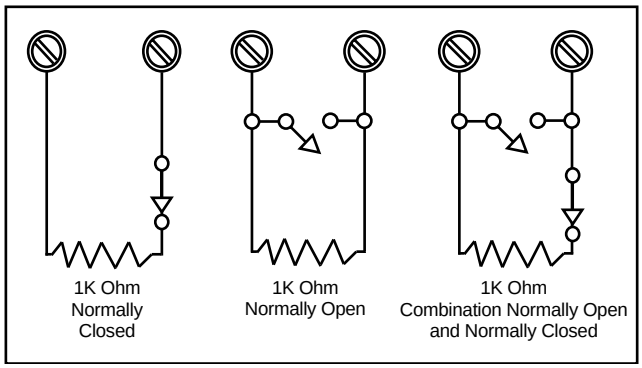


Figure 4: Protection Zone Contact Wiring

10.3 Zone Response Time

A condition must be present on a zone for 500 milliseconds before it is detected by the panel. Ensure detection devices used on the protection zones are rated for use with this delay.

10.4 Keyswitch Arming Zone

You can use a momentary keyswitch on a zone programmed as an Arming type for use in arming and disarming the system without a code.

Powered Zone for 2-Wire Smoke Detectors

11.1 Terminals 25 and 26

A resettable 2-wire Class B powered zone is provided on terminals 25 (positive) and 26 (negative) of the panel. For programming purposes, the zone number is 10 on the XR20/XR40 and zone 6 on the XRSuper6. The zone uses a Model 309, 3.3k Ohm EOL resistor (provided with the panel) and has an operating range of 8.8 to 14.2 VDC.

The UL compatibility identifier is: A.

Caution: Sensor reset on zone 10 (zone 6 on the XRSuper6) will drop power to devices on this zone, causing the panel to sense an open condition on all zone types other than Fire, Fire Verify, and Supervisory. Whenever non-Fire and non-Supervisory zone types are used on zone 10, make the appropriate adjustments to the zone's Armed Action to prevent false alarms from occurring.

Manufacturer	Model	Detector ID	Base	Base ID	Panel Model	# of Detectors	Zone Expansion Modules
Detection Systems	DS250, DS250TH	B	MB2W, MB2WL	A	XR20/XR40	10	715, 715-8, 715-16, 725
Detection Systems	DS250HD	B	MB2W, MB2WL	A	XR20/XR40	10	715, 715-8, 715-16
Detection Systems	DS282, DS282TH	B			XR20/XR40	10	715, 715-8, 715-16, 725
DMP/Hochiki	SLK-835	HD-5	HSB-200, HSB-200N	HB-55	XRSuper6/ XR20/XR40	7	715, 715-8, 715-16
DMP/Hochiki	SLR-835	HD-3	NS6-100	HB-55	XRSuper6/ XR20/XR40	7	715, 715-8, 715-16, 725
DMP/Hochiki	SLR-835B	HD-6			XRSuper6/ XR20/XR40	7	715, 715-8, 715-16, 725
Sentrol/ESL	429AT, 521B, 521BXT	S09A			XR20/XR40	12	715, 715-8, 715-16
System Sensor	1100, 1400	STD			XR20/XR40	10	715
System Sensor	1151, 2151	STD	B110PL, B401		XR20/XR40	10/10	715, 725
System Sensor	1451, 2451TH	STD	B401, B401B		XR20/XR40	10	715
System Sensor	1451DH	STD	DH400		XR20/XR40	10	715
System Sensor	2100, 2100T	STD			XR20/XR40	10	715
System Sensor	2100S, 2100TS	A			XR20/XR40	12	725
System Sensor	2400, 2400AT, 2400AIT, 2400TH	STD			XR20/XR40	10	715
System Sensor	2451	STD	B401, B401B, DH400		XR20/XR40	10	715

11.2 Wiring Zone 10 on XR20/XR40

The end-of-line resistor for zone 9 must not be accidentally connected to the positive terminal of zone 10 as shown below.

When zone 9 is incorrectly connected to zone 10, a false alarm may occur on zone 2 of the panel when the panel picks up the telephone line to communicate to the receiver.

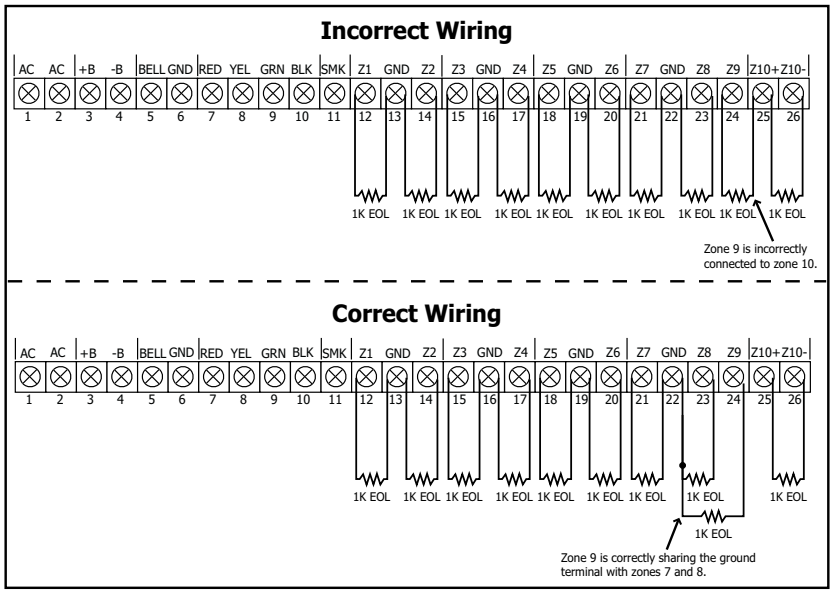

Incorrect Wiring
AC AC +B -B BELL GND RED YEL GRN BLK SMK Z1 GND Z2 Z3 GND Z4 Z5 GND Z6 Z7 GND Z8 Z9 Z10+ Z10-
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26
1K EOL
Zone 9 is incorrectly connected to zone 10.
Correct Wiring
AC AC +B -B BELL GND RED YEL GRN BLK SMK Z1 GND Z2 Z3 GND Z4 Z5 GND Z6 Z7 GND Z8 Z9 Z10+ Z10-
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26
1K EOL
Zone 9 is correctly sharing the ground terminal with zones 7 and 8.

Figure 5: Zone 9 and 10 End-of-Line Resistor Placement

Annunciator Outputs

12.1 Description

The four annunciator outputs can be programmed to indicate the activity of the panel's zones or conditions occurring on the system. Annunciator outputs do not provide a voltage but instead switch-to-ground voltage from another source. The outputs can respond to any of the conditions listed below:

1) Activation by zone condition: Steady, Pulse, Momentary, or Follower
2) Manually from the Security Command keypad
3) Communication failure
4) Armed area annunciation
5) Fire Alarm or Fire Trouble
6) Ambush alarm
7) Exit and Entry timers
8) System Ready
9) Ground start activation
10) Cellular Backup
11) Late to Close

12.2 Harness Wiring

The open collector outputs are accessible by installing the DMP 300 Harness on the 4-pin header labeled J11. The output locations are shown below. For UL applications, devices connected to the outputs must be located within the same room as the panel.

Output	Color	Wire	Output	Color	Wire
1	Red	1	3	Green	3
2	Yellow	2	4	Black	4

12.3 Model 860 Relay Module

Connect a Model 860 Relay Module to the panel to provide relays for the annunciator outputs that can be used for electrical isolation between the alarm panel and other systems or for switching voltage to control various functions. The module includes one relay and provides three additional sockets for expansion of up to four relays. Power is supplied to the relay coils from the panel's keypad bus. The 860 mounts inside the panel enclosure using the 3-hole mounting configuration. Plastic standoffs are provided with the module for ease of installation. A 4-wire harness is also provided that connects the Model 860 to the DMP panel.

Relay Contact Rating: 1 Amp at 30 VDC

Telephone RJ Connector

13.1 Description

Connect the panel to the public telephone network by installing a DMP 356 RJ Cable between the panel's J4 connector and the RJ31X or RJ38X phone jack.

A two pin header labeled RJ SUP (J7) is provided to allow monitoring of the telephone cable connected between the panel and a RJ38X jack (pins 2 and 7 jumpered). Attach a DMP Model 306 Harness between J7 and any available zone. The pins of J7 are connected via the telephone cable to 2 and 7 of the RJ38X jack. The RJ38X jack provides a jumper between pins 2 and 7 which completes the circuit.

When the zone is programmed for a Supervisory type (SV) and the telephone cable is removed, the keypad displays the zone in trouble and produces a steady tone.

13.2 FCC Registration

The panel complies with FCC part 68 and is registered with the FCC.

Registration number: CCKUSA - 18660 - AL - R

Ringer Equivalence: 1.1B

13.3 Notification

Registered terminal equipment must not be repaired by the user. In case of trouble, the device must be immediately unplugged from the telephone jack. The factory warranty provides for repairs. Registered terminal equipment may not be used on party lines or in connection with coin telephones. Notification must be given to the telephone company with the following information:

a. The particular line(s) the service is connected to
b. The FCC registration number
c. The ringer equivalence
d. The make, model, and serial number of the device

13.4 Ground Start

To configure the panel for ground start operation, you must install the appropriate ground start module and program one of the panel's available annunciator outputs for Ground Start operation. Refer to the panel Programming Guide for complete programming information. This option must not be selected on a UL listed system.

Reset Jumper J16

14.1 Description

There are two reset jumpers located at the top right of the panel's circuit board labeled RESET. Momentarily shorting these jumpers allows you to reset the microprocessor. Resetting the panel allows you to enter the panel's internal programmer.

To reset the panel when first installing the system, place the blade of a slotted screwdriver across the two reset jumpers after applying power to the panel.

To reset the panel while the system is operational (for example, prior to reprogramming), you can short the jumpers without powering down the system.

After resetting the panel for programming, you must begin within 30 minutes. If you wait longer than 30 minutes, you will have to reset the panel again.

Universal UL Burglary Specifications

15.1 Introduction

The programming and installation specifications contained in this section must be completed when installing the XRSuper6/XR20/XR40 in accordance with any of the UL burglary standards. Additional specifications may be required by a particular standard.

15.2 Wiring

All wiring must be in accordance with NEC, ANSI/NFPA 70, UL 681, and UL 611 for all burglary installations.

15.3 Police Station Phone Numbers

The digital dialer telephone number programmed for communication must not be a police station phone number, unless that phone number is specifically provided for that purpose.

15.4 Bypass Reports

The bypass reports must be programmed as YES for all UL burglary applications. See LT-0305.

15.5 System Maintenance

Proper installation and regular maintenance by the installing alarm company and frequent testing by the end user is essential to ensure continuous satisfactory operation of any alarm system. Offering a maintenance program and acquainting the user with the correct procedure for use and testing of the system is also the responsibility of the installing alarm company.

15.6 Cross-Zoning

Zones used for cross zoning must detect the same event and shall not conflict with UL 681 or 1641.

15.7 Ground Start

Ground Start phone lines must not be used for UL listed systems.

15.8 UL Listed Receivers

UL has verified operation with the DMP SCS-1 and SCS-1R Security Receivers, Sur-Gard MLR2-E, SG-HLR2-DG, FBII CP220PB, Osborne-Hoffman Quick-Alert, and Radionics D6500 receivers.

UL 1023 Specifications

Household Burglar-Alarm System Units

16.1 Bell Cutoff

The bell cutoff time cannot be less than five minutes. See the Programming Guide (LT-0305).

16.2 Entry Delay

The maximum entry delay used must not be more than 45 seconds. See the XRSuper6/XR20/XR40 Programming Guide (LT-0305).

16.3 Exit Delay

The maximum exit delay used must not be more than 60 seconds. See the Programming Guide (LT-0305).

16.4 Zone Expansion on 4-Wire Bus

When expansion zones are used, the keypad and zone expander 4-wire bus must be limited to three feet in length unless an external communication fail indicator is added. A 12 VDC relay may be wired as a communication fail indicator. To install, connect the negative side of the indicator to one of the panel's annunciator outputs and the positive side to the smoke power (terminal 11 of the panel). See the XRSuper6/XR20/XR40 Programming Guide (LT-0305).

In addition to the wiring described above, a 24-hour zone must be programmed to activate the appropriate annunciator output.

UL 1610 and 1076 Specifications

Central-Station and Proprietary Burglar-Alarm Units

17.1 Opening/Closing Reports

The Opening/Closing Reports option must be programmed as YES. See the Programming Guide (LT-0305).

17.2 Automatic Bell Test

This option must be programmed as YES. See the XRSuper6/XR20/XR40 Programming Guide (LT-0305).

17.3 Proprietary Dialer

The Model XRSuper6/XR20/XR40 provides Grade A proprietary service when configured as a digital dialer.

UL 1635 Specifications

Digital Burglar Alarm Communicator System Units

18.1 Digital Dialer Telephone Number

Both programmed telephone numbers must begin with a D or P. See the Programming Guide (LT-0305).

18.2 Entry Delay

The maximum entry delay used must not be more than 60 seconds. See the Programming Guide (LT-0305).

18.3 Exit Delay

The maximum exit delay used must not be more than 60 seconds. See the Programming Guide (LT-0305).

18.4 Test Frequency

The Test Frequency option must be programmed to send a report once every 24 hours. See LT-0305.

18.5 Automatic Bell Test

This option must be programmed as YES. See the XRSuper6/XR20/XR40 Programming Guide (LT-0305).

18.6 Grade B Central Station

Grade B Central Station service can be provided under UL 1635 by adding a Grade A local audible signal appliance and placing the XRSuper6/XR20/XR40 panel into the Model 350A Grade A Attack Resistant Housing.

UL 365 And 609 Specifications

Police Station Connected and Local Burglar Alarm Units and Systems

19.1 Entry Delay

The maximum entry delay must not exceed 60 seconds with the Model 350A Grade A housing. See LT-0305.

19.2 Grade A Bell

A Grade A local audible signal appliance must be used.

19.3 Bell Cutoff

The bell cutoff time cannot be less than 15 minutes. See the Programming Guide (LT-0305).

19.4 Automatic Bell Test

The Automatic Bell Test option must be programmed as YES. See the Programming Guide (LT-0305).

19.5 Grade A Mercantile

For Grade A Mercantile and Police Station Connect operation the XRSuper6/XR20/XR40 must be mounted in a Grade A attack resistant housing (DMP Model 350A).

19.6 Mercantile Safe and Vault

When the DMP Model 350A housing is used, the panel provides operation as a mercantile safe and vault alarm. Bell Supervision and wiring must be in accordance with UL 681. If the panel is mounted outside the safe or vault, tamper protection and the Sentrol Model 5402 or Potter EVD listed vibration detectors should be used. The XRSuper6/XR20/XR40 does not provide operation as a Bank Safe and vault alarm.

19.7 Line Security for Police Connect

Basic line security is provided when the Model XRSuper6/XR20/XR40 is configured as a dialer system.

Universal UL And NFPA Fire Alarm Specifications

20.1 Introduction

The programming and installation specifications contained in this section must be completed when installing the Model XRSuper6/XR20/XR40 in accordance with any of the UL or NFPA fire standards. Additional specifications may be required by a particular standard.

20.2 Wiring

All wiring must be in accordance with NEC, ANSI/NFPA 70.

20.3 Police station phone number

The digital dialer telephone number programmed for communication must not be a police station phone number, unless that phone number is specifically provided for that purpose.

20.4 System maintenance

Proper installation and regular maintenance by the installing alarm company and frequent testing by the end user is essential to ensure continuous satisfactory operation of any alarm system. Offering a maintenance program and acquainting the user with the correct procedure for use and testing of the system is also the responsibility of the installing alarm company.

20.5 Audible alarm

Fire Type zones should be programmed to activate an audible alarm. The Bell Action for Fire Type zones should not be programmed as "N." See the XRSuper6/XR20/XR40 Programming Guide (LT-0305).

20.6 Fire zone programming

Fire zones must be programmed to activate a trouble on open conditions and an alarm on short conditions. The swinger bypass function must not be used on any fire zones. See the Programming Guide (LT-0305).

20.7 Ground Start

Ground Start phone lines must not be used for UL listed systems.

20.8 UL Listed Receivers

UL has verified operation with the DMP SCS-1/SCS-1R Security Receiver, Sur-Gard MLR2-E, SG-HLR2-DG, FBII CP220PB, Osborne-Hoffman Quick-Alert, and Radionics D6500 receivers.

UL 985 NFPA 72 (Chapter 2) Specifications

Household Fire Warning System Units

21.1 Bell output definition

The bell output of the Model XRSuper6/XR20/XR40 must be programmed to operate steady on burglary alarms and pulsed on fire alarms. See the XRSuper6/XR20/XR40 Programming Guide (LT-0305).

21.2 Indicating Circuit Supervision

The DMP Models 865 and 866 Notification Circuit Module must be used on the bell circuit for detection of shorts and grounds.

California State Fire Marshal Specifications

22.1 Bell Output Definition

The bell output of the Model XRSuper6/XR20/XR40 must be programmed to operate steady on burglary alarms and temporal on fire alarms. See the XRSuper6/XR20/XR40 Programming Guide (LT-0305).

Troubleshooting

23.1 Troubleshooting Section

This section of the Installation Guide provides troubleshooting information for use when installing or servicing an XRSuper6/XR20/XR40 system.

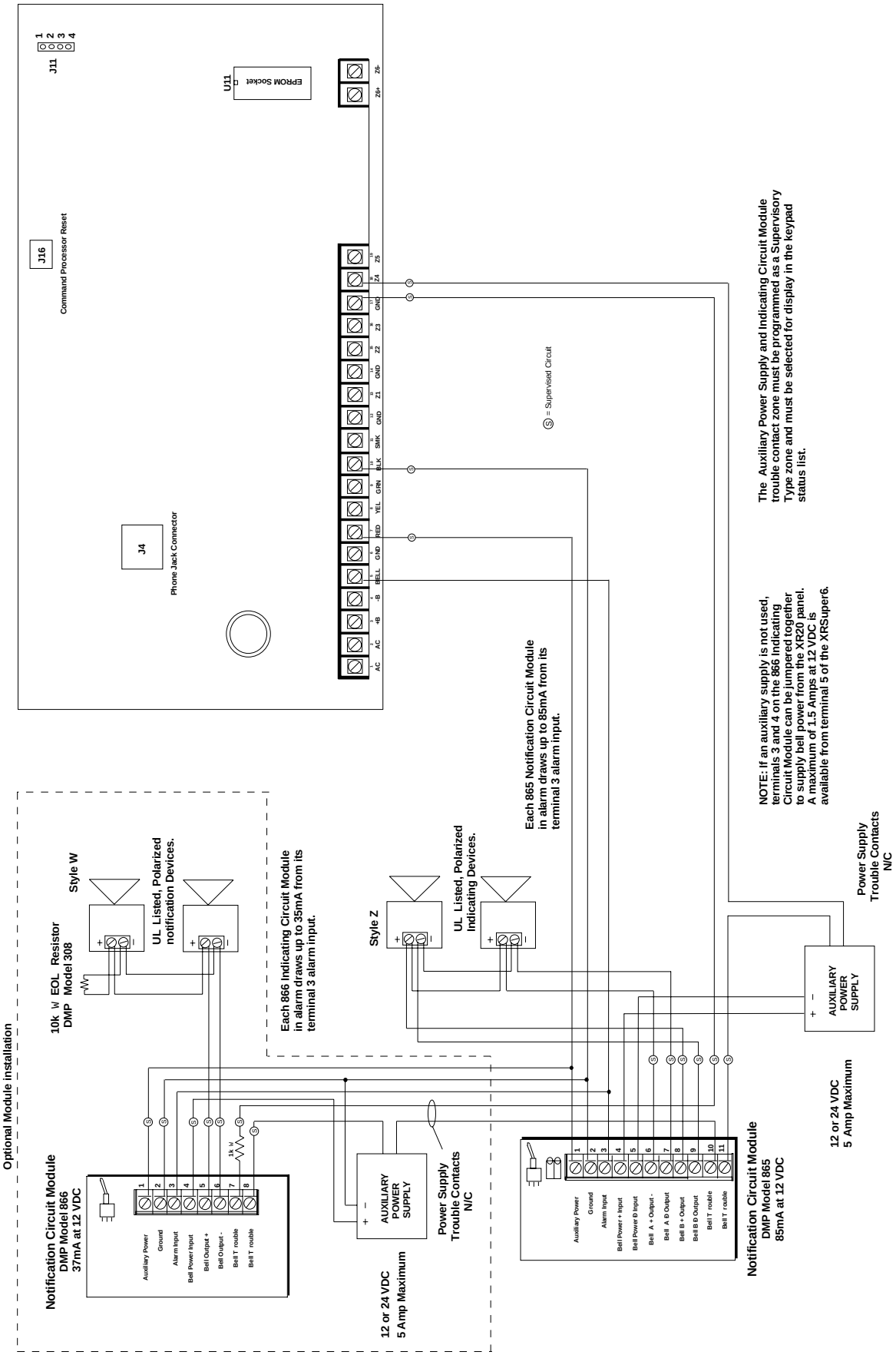
Problem	Possible Cause	Possible Solutions
Keypad displays "SERVICE REQUIRED"	J16 Jumper is installed.	Remove the J16 reset jumper.
	Open or short on the green data wire to the keypad.	Check for broken or shorted wires between the panel and the keypad.
	Bad keypad or zone expander.	Replace with a new or repaired keypad or zone expander.
Keypad display is not functional. When a key is pressed, only a short beep is emitted.	Open or short on the yellow data wire to the keypad.	Check for broken or shorted wires between the panel and the keypad.
	Bad keypad or zone expander.	Replace with a new or repaired keypad or zone expander.
Keypad beeps when keys are pressed, but will not allow the user to arm or disarm, or enter the User Menu.	Two or more keypads are assigned to the same address.	Set each keypad on the system to a unique address.

23.2 Common Keypad Displays

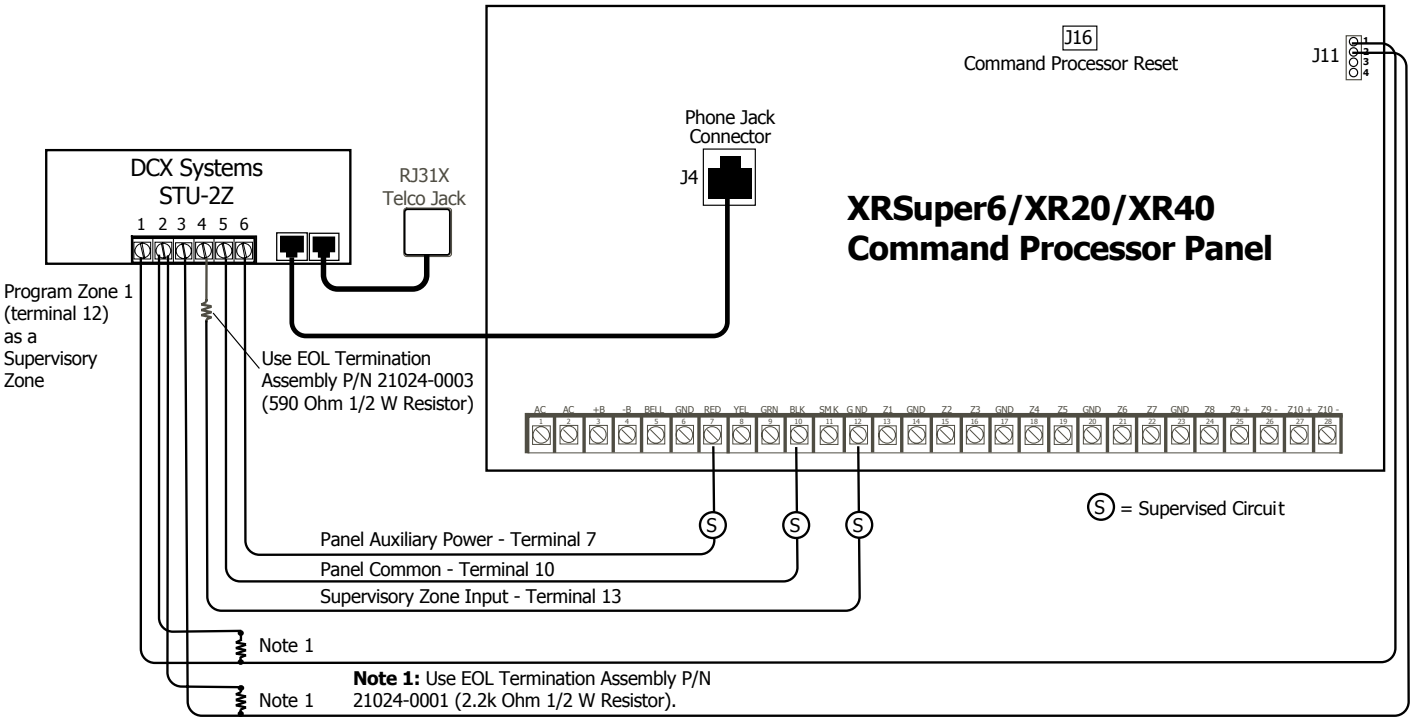
Listed below are several keypad messages you may see on the display. Follow the instructions in the Possible Solutions column to correct the problem.

Message	Meaning	Possible Solutions
Invalid Code	The user code you have entered is not recognized by the system.	Check the user code and try again.
Late to Close (XR20/ XR40 Only)	The system was not armed at its scheduled closing time.	Users still on the premise should arm the system or extend the schedule to a later time.
AC Trouble	The system is not getting proper power.	Check that the AC connections are good.
Battery Trouble	The battery is either low or missing.	Check that the battery connections are good and the battery is still good.
Phone Line Trouble	The panel is looking for phone jack supervision.	Install a jumper wire between terminals 2 and 7 on the phone jack.
System Trouble or Service Required	There is a problem with one or more components in the system.	Make sure the J16 jumper is removed from the panel. Make sure there is not a short or open condition on the green data wire to the keypad. You may also need to check that all of the keypads and expansion modules on the bus are good.
System Busy	The system is performing another task with a higher priority.	Wait a few moments for the system to complete the task. Make sure the J16 jumper is not on the panel. If the message displays for a long period of time, the processor could be locked up.
4-Wire Bus Trouble	There is not a supervised device on the bus.	Program a device to be supervised.
	There is low voltage or an open yellow wire.	Make sure all wires are connected.
	Two devices share the same address.	Program one of the devices to a unique address.
Transmit Fail	The panel has attempted to communicate with the central station 10 times and has not succeeded.	Verify your communication type, account number, and phone number. Make sure the telephone line is connected and working properly.
Man Number	A service man number has been assigned using Remote Link.	Enter your Service Man Code to obtain access to the panel.

24.1 Multiple Indicating Circuit Module Installation


J11
1 2 3 4
EPROM Socket
U11
J16
Command Processor Reset
J4
Phone Jack Connector
AC AC +B -B BELL GND RED YEL GRN BLK SMK GND Z1 GND Z2 Z3 GND Z4 Z5 Z6+ Z6-
S = Supervised Circuit
The Auxiliary Power Supply and Indicating Circuit Module trouble contact zone must be programmed as a Supervisory Type zone and must be selected for display in the keypad status list.
NOTE: If an auxiliary supply is not used, terminals 3 and 4 on the 866 Indicating Circuit Module can be jumpered together to supply bell power from the XR20 panel. A maximum of 1.5 Amps at 12 VDC is available from terminal 5 of the XRSuper6.
Each 865 Notification Circuit Module in alarm draws up to 85mA from its terminal 3 alarm input.
Each 866 Indicating Circuit Module in alarm draws up to 35mA from its terminal 3 alarm input.
Style Z
UL Listed, Polarized Indicating Devices.
Style W
UL Listed, Polarized notification Devices.
10k W EOL Resistor DMP Model 308
Power Supply Trouble Contacts N/C
AUXILIARY POWER SUPPLY
12 or 24 VDC 5 Amp Maximum
Optional Module installation
Notification Circuit Module DMP Model 866 37mA at 12 VDC
Auxiliary Power
Ground
Alarm Input
Bell Power Input
Bell Output +
Bell Output -
Bell T rouble
Bell T rouble
1k W
Power Supply Trouble Contacts N/C
AUXILIARY POWER SUPPLY
12 or 24 VDC 5 Amp Maximum
Notification Circuit Module DMP Model 865 85mA at 12 VDC
Auxiliary Power
Ground
Alarm Input
Bell Power + Input
Bell Power D Input
Bell A + Output -
Bell A D Output
Bell B + Output
Bell B D Output
Bell T rouble
Bell T rouble

24.2 Installation for Derived Channel Burglary


J16
Command Processor Reset
J11
Phone Jack Connector
J4
DCX Systems STU-2Z
1 2 3 4 5 6
RJ31X Telco Jack
XRSuper6/XR20/XR40 Command Processor Panel
Program Zone 1 (terminal 12) as a Supervisory Zone
Use EOL Termination Assembly P/N 21024-0003 (590 Ohm 1/2 W Resistor)
AC AC +B -B BELL GND RED YEL GRN BLK SMK GND Z1 GND Z2 Z3 GND Z4 Z5 GND Z6 Z7 GND Z8 Z9 + Z9 - Z10 + Z10 -
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28
S = Supervised Circuit
Panel Auxiliary Power - Terminal 7
Panel Common - Terminal 10
Supervisory Zone Input - Terminal 13
Note 1
Note 1
Note 1: Use EOL Termination Assembly P/N 21024-0001 (2.2k Ohm 1/2 W Resistor).

INTERFACING STU-2Z/STU-4Z TO THE XRSuper6/XR20/XR40 PANELS

The STU-2Z or STU-4Z may only be used in conjunction with telephone systems that support DCX Systems Derived Channel multiplex network. The STU-2Z or STU-4Z can only be installed in a DMP Model 350 enclosure.

Burglary

The STU-2Z and STU-4Z are cross listed with the XRSuper6/XR20/XR50 panels as an accessory for Grade AA Central Station Burglar Alarm. For Grade AA, the following conditions must be met:

- The panel must be installed and programmed to meet Grade A burglary alarm system requirements.
- The panel must be installed and programmed for reporting all alarm conditions through the integral DACT to the same central station that monitors the STU-2Z or STU-4Z.
- The STU-2Z or STU-4Z must be mounted in the panel enclosure and wired according to Section 32.4 above.
- Once installed, the central station must enable 2-minute off-hook polling of the STU-2Z or STU-4Z.

Supplementary Reporting (for Commercial Burglar Alarm Applications)

The two zones of the STU-2Z or the four zones of the STU-4Z may be used for supplementary reporting by meeting the following requirements.

1. Program Relay Output #1 for all alarm conditions that are required to report alarm on Zone 1 of the STU-2Z or STU-4Z.
2. Program Relay Output #2 for all alarm conditions that are required to report alarm on Zone 2 of the STU-2Z or STU-4Z.
3. Wire the normally-open terminals of Relay Output #1 to Terminal 1 of the STU-2Z or STU-4Z.
4. Wire the common terminal of Relay Output #1 to Terminal 2 of the STU-2Z or STU-4Z.
5. Wire the normally-open terminal of Relay Output #2 to Terminal 3 of the STU-2Z or STU-4Z.
6. Wire the common terminal of Relay Output #2 to Terminal 2 of the STU-2Z or STU-4Z.

Commercial Fire

When the XRSuper6/XR20/XR40 panel is used as a Central Station Alarm Commercial Fire System with one telephone line, in conjunction with DCX Systems STU-2Z or STU-4Z, the following conditions must be met:

- The panel must be installed and programmed to meet commercial fire (reporting) systems requirements.
- The panel must be installed and programmed for reporting all alarm conditions and trouble conditions to the same central station that monitors the STU-2Z or STU-4Z.
- The STU-2Z or STU-4Z must be mounted in the panel enclosure and wired according to Section 32.4 above.
- Once installed, the central station must enable 2-minute off-hook polling of the STU-2Z or STU-4Z.

Installing the STU-2Z/STU-4Z into the DMP Model 350 Enclosure

The STU board is mounted in the left side of the DMP Model 350 enclosure by slipping the optional corner mounting bracket over the edge of the enclosure. Use DCX Part # 27074-002 (2Z) or Part # 27078-001 (4Z). Connect the STU power wires and telco cables to the panel terminals and RJ31X as shown in Section 24.2 above.

OPERATING INSTRUCTIONS MODEL XRSuper6/XR20/XR40 PANELS

When using Model 692 LED Keypad, please refer to 692 User Guide (LT-0275)

NORMAL STANDBY CONDITION

When the system is in the normal standby condition, the keypad shows either the time of day/System Ready or a blank display.

ALARM CONDITION

When the system is in an alarm condition, the keypad keys glow red and the display shows the violated zone name(s) followed by an alarm display.

ARMING THE SYSTEM

Press the COMMAND key until arming options appear. Press Select key under the arming option desired, then enter your user code.

DISARMING THE SYSTEM

All/Perimeter and Home/Sleep/Away Systems: Enter your user code. If the system is in alarm the keypad will display DISARM SILENCE. Press the Select key under DISARM.

Area Systems: Enter your user code. If the system is in alarm the keypad will display DISARM SILENCE. Press the Select key under DISARM.

Important: Disarming during an alarm sends an Abort report to the central station if your system is programmed to send Abort reports! Be sure you want the alarm message cancelled before disarming during an alarm.

ALARM SILENCE

To silence the alarm while the bell or siren is sounding, enter your code number, press the COMMAND key, and press the Select key under SILENCE. This silences the alarm but does not cancel any alarm reports to the central station. Silencing an alarm while the bell is sounding sends an Abort report to the central station if your system is programmed to send Abort reports.

RESETTING DETECTORS

To reset a smoke or other detector, enter the User Menu by pressing the COMMAND key until MENU? NO YES appears in the display. Press the top row key under YES. The display shows ENTER CODE: -. Enter your code number and press COMMAND. The keypad display now shows SENSOR RESET? Press any top row key.

TROUBLE CONDITION

When a device is in a trouble condition, the keypad tones and displays the zone or device name followed by TRBL. Press any top row key to silence.

SYSTEM TESTING

You should test the security system periodically to ensure proper operation. You can do this through a function in the User Menu. After entering the User Menu, press the COMMAND key until SYSTEM TEST? displays. Press any top row key to test the system bell, battery, and communication to the central station receiver.

ALARM SERVICE

If service is required for this system, please contact:

Company _____

Address_____

Telephone _____

The operating instructions above should be attached to the front, or framed and located adjacent to the panel or a Security Command keypad with an alphanumeric display.

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